Date: Sun, 14 Nov 93 09:40:40 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #1344

To: Info-Hams

Info-Hams Digest Sun, 14 Nov 93 Volume 93 : Issue 1344

Today's Topics:

10 meter beacons
Abbreviating Dates (2 msgs)
FCC question pools on the net?

FM on 7105 khz

How to find the answers to frequently-asked questions about Ham Radio remote switch

What do I do now/ (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 12 Nov 1993 06:35:53 GMT

From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa

Subject: 10 meter beacons To: info-hams@ucsd.edu

Gang,

In a previous discussion someone mentioned the monitoring of beacons to check band openings, so here is a rather complete list of 10 meter beacons. I received this from ham-server@grafex.sbay.org.

What I find very interesting to note is the very low power that most of these beacons use; a good portion are in the QRP range (5 watts or less). As is said, when the band is open, one can use flea-power and still be heard.

Jeff NH6IL

Subject: File K:/hamradio/10meters/10mbeaco.lst, in plaintext, Part 1

----- cut here -----

The following 10 meter beacon list has been compiled and maintained by Joe Gumino (K20LG). If you have any corrections, additions or deletions please direct them to me (WA2ZYU @ KB1BD-4) and I will forward them to Joe. Thank you for your interest and response to this list in the past. Joe and I shall work to keep it current.....agn tnx & 73.

10 METER BEACON'S de K20LG 2/19/90 Part 1

Edited and distributed under OKIPN by N8GTC

FRE	ΞQ.	CALL	OPERATION	LOCATION	NOTES
		VE3TEN	С	OTTAWA, CANADA	10W, GP
28.	.191	VE6YF		EDMONTON, ALBERTA	10W
		IY4M		BOLOGNA, ITALY	20W, 5/8 GP
28.	.200	GB3SX	С	CROWBOROUGH, ENGLAND	8W, DIPOLE
28.	.201	LU8ED		ARGENTINA	5W
28.	.202	KE5GY		ARLINGTON, TX	5W, VERTICAL
28.	. 2025	ZS5VHF		NATAL, RSA	5W, GP
28.	. 204	DLOIGI	С	W. GERMANY	100W, VERT. DIPOLE
28.	. 205	KA30EM		MEADVILLE, PA.	27W, YAGI/WEST
28.	. 206	KJ4X		PICKENS, SC	2W, VERTICAL
28.	.2075	W8FKL	С	VENICE, FLA	10W, VERT.
28.	.208	WA1IOB	С	MARLBORO, MASS	75W, VERT.
28.	. 209	NX20	С	STATEN ISLAND, NY	10W, GP
28.	.210	3B8MS	С	MAURITIUS	GP
28.	.210	K4KMZ	I	ELIZABETHTOWN, KY.	20W, VERT.
28.	.210	KC4DPC	С	WILMINGTON, NC	4W, DIPOLE
28.	.212	EA6RCM		PALMA DE MALLORCA	4W, 5 EL NNE
28.	. 2125	ZD9GI	С	GOUGH IS.	GP
28.	.215	GB3RAL	С	SLOUGH, BERKSHIRE	20W, GP
28.	. 2175	W8UR		MACKINAW ISLAND,MI	.5W, GP
28.	.2175	WB9VMY	С	CALUMET, OK.	2W, DIPOLE
28.	.2195	LU4XS		CAPE HORN	
28.	.220	5B4CY	С	CYPRUS	26W, GP
28.	.221	PY2G0B		SAN PAULO, BRAZIL	15W, VERT.
28.	.222	W9UX0	С	NR CHICAGO, ILL.	10W, GP
		HG2BHA	С	TAPOLCA, HUNGARY	10W, GP
		PY2AMI	С	SAO PAULO, BRAZIL	
	. 2275		С	MALLORCA, BALEARIC IS.	10W, 5/8 GP

28.230	ZL2MHF	С	MT. CLIMIE, NZ.	50W, VERT. DIPOLE
	W7JPI/AZ	С	SONOITA, ARIZ.	5W, 3 EL YAGI NE
28.233	•	С	JUPITER, FLA.	7W, GP
	VP9BA	С	HAMILTON, BERMUDA	10W, GP
	LA5TEN	C	OSLO, NORWAY	10W, 5/8 GP
	5Z4ERR	C	KIAMBU, KENYA	
	A92C		BAHRAIN	NW/SE DIPOLE
	ZS1CTB	С	CAPETOWN, RSA	20W, 1/4 VERT.
	EA3JA	O	BARCELONA, SPAIN	20W, 1/4 VENT:
28.2475		I	SPAIN	6W, GP
28.248		C	BELAST, MAINE	5W, VERT. DIPOLE
28.250		C	ELVERSON, PA	10W, VERT.
28.250		C	DES MOINES, IA	2W, GP
	Z21ANB	C	BULAWAYO, ZIMBABWE	15W, GP
	4N3ZHK	C	MT. KUM, YUGOSLAVIA	1W, VERT.
	WJ7X	C	SEATTLE, WA	5W, RINGO
	WB4JHS	I	FLORISSANT, MO.	7W, VERT.
28.2525		1	FINLAND	/W, VEICI.
	LU1UG		GRAL PICO, ARGENTINA	5W, GP
28.2575		С	ARBEITSGEN, W. GERMANY	40W, GP
	WB9FVR	C	PEMBROKE PINES, FLA.	1W, DIPOLE
28.260		C		10W, GP
	VK2RSY	C	SYDNEY, NSW, AUSTRALIA	25W, GP
	VK6RWA	C	PERTH, WA, AUSTRALIA	25W, GF
	VK6RTW	C	ALBANY, WA, AUSTRALIA	
	KB4UPI	C	BIRMINGTON, ALA	20W, 1/4 VERT.
	W9KF0	I	-	750MW, VERT.
	ZS6PW	C	EATON, ILL PRETORIA, RSA	10W, 3 EL YAGI
		C	-	10W, 3 EL FAGI
	VK4RTL	I	TOWNSVILLE, QLD, AUSTRALIA	10W VERT DIROLE
	9L1FTN	1	FREETOWN, SIERRA LEONE	10W, VERT. DIPOLE
28.2745		•	STILLBAY, RSA	20W, 3 EL YAGI NW
	AL7GQ	C	DENVER, CO	1W, LOOP
28.2755		I	STOCKTON, CA	20W, 3 EL YAGI
	DF0AAB	С	KIEL, W. GERMANY	10W, GP
	LU8EB	0	ARGENTINA	5W
	VE1MUF	С	FREDRICKTON, NB, CANADA	500MW, DIPOLE
	VE2H0T	C	BEACONSFIELD, QUE	5W, VERT DIPOLE
28.2825	OK0EG	С	HRADEC KRALOVE	10W, DIPOLE
	VP8ADE	С	ADELAIDE IS, NR ANTARCTICA	
	KE2DI	•	NR ROCHESTER, NY	2W, VERT. DIPOLE
	KK4M	С	LAS VEGAS, NEV.	5W, VERT.
	W80MV	•	NR ASHVILLE, NC.	5W, GP
	H44SI	C	SOLOMON IS.	15W
28.288	W2NZH	I	MOORESTOWN, NJ	3W, GP
28.290	SK5TEN	0	SWEDEN	40U VEDT
	VS6TEN	С	HONG KONG	10W, VERT.
	ZD8HF		ASCENSION ISLAND	ELL OD
28.2925	LU2FFV		SAN JORGE, ARGENTINA	5W, GP

28.295	WC8E	I	CINCINNATI, OHIO	10W, RINGO
28.296	W3VD	С	LAUREL, MARYLAND	1.5W, VERT. DIPOLE
28.297	WA4DJS	I	FT. LAUDERDALE, FLA	30W, GP
28.301	KF4MS	С	ST. PETERSBURG, FLA	5W
28.3025	PT7AAC		FORTALEZA, BRAZIL	5W, GP
28.306	PT8AA		RIO BRANCO, BRAZIL	5W, GP
28.315	ZS6DN	С	IRENE, RSA	100W, VERT.
28.888	W6IRT		HOLLYWOOD, CA	5W, GP CODE PRACTICE
28.992	DF0ANN		MOTITZBERG, W. GERMANY	20MW, 1 EL DELTA LOG

* REVISION

----- cut here -----

-- This is the last part -----

- -

End of session.

Oh, hopefully the NH6IL/B 10 meter beacon will be operational in January; as of now Hawaii is not represented on 10. I'm shooting for 28.203 - I'll make an announcement when it's on the air. 5 watts into a 5/8 wave vertical.

Jeff NH6IL

Date: 14 Nov 93 13:58:04 GMT

From: noc.near.net!news.delphi.com!gilbaronw0mn@uunet.uu.net

Subject: Abbreviating Dates

To: info-hams@ucsd.edu

>In article <9311122339.AA02883@cmr.ncsl.nist.gov> rc@cmr.ncsl.NIst.GOV (Robert Carpenter) writes:

>> >>

>>Abbreviated Countries where used >>-----

>> 12/15/1993 USA

>> 15/12/1993 Belgium, Spain, Italy, United Kingdom, Brazil,

IMHO the only one that make sense is one that is not ambiguous. That uses the 3 character month field. Example 20JUN1993. No possible ambiguity here. Any of the others can be. For computers the one that takes the least storage would be the best. You are going to tell the computer how to read it so no ambiguity there either since it carries with the program the definition.

Gil Baron, El Baron Rojo, WOMN Rochester,MN "Bailar es Vivir"

PGP2.X key at key servers or upon request

Date: Sat, 13 Nov 1993 13:45:00 +0000

From: doc.ic.ac.uk!uknet!demon!llondel.demon.co.uk!dave@decwrl.dec.com

Subject: Abbreviating Dates

To: info-hams@ucsd.edu

In article <9311122339.AA02883@cmr.ncsl.nist.gov> rc@cmr.ncsl.NIst.GOV (Robert
Carpenter) writes:

>

```
>Abbreviated
               Countries where used
>-----
                _____
> 12/15/1993
                USA
> 15/12/1993
                Belgium, Spain, Italy, United Kingdom, Brazil, International
                English, Latin America
> 15.12.1993
                Finland, France, Germany, Norway, Switzerland
> 15-12-1993
                Denmark, Netherlands, Portugal
> 1993-12-15
                Canada(French), Hungary, Yugoslavia, Czechoslovakia, Sweden,
                Poland
>Note: Doesn't Japan use something like the last format (above)?
>It also seems to me that following is true...
> 19931215
               American National Standards Institute (since it collates
                directly without any special treatment).
>
```

I would say the standard USA format is the worst - at least all the others manage to go either most significant to least significant or vice versa. When you add the time to it, the ones with the year first make the most sense in computer terms.

Wasn't there a court case in the USA once where a European had died and left a will which was apparently dated *after* he died? Evidence had to be produced in court to prove that over this side of the pond we use DD/MM/YY instead of MM/DD/YY. Perhaps legal documents should not be signed before the 13th of the month in order to make such things a bit clearer :-)

Dave

- -

Date: 10 Nov 93 09:52:46 -0800

From: swrinde!cs.utexas.edu!howland.reston.ans.net!agate!library.ucla.edu!

csulb.edu!nic.csu.net!vax.sonoma.edu!butler@network.ucsd.edu

Subject: FCC question pools on the net?

To: info-hams@ucsd.edu

Are the question pools for FCC license exams available on the net?

If so, where?

Thanks for any help,

-Bob

Date: Thu, 11 Nov 93 04:30:42 GMT

From: swrinde!cs.utexas.edu!howland.reston.ans.net!newsserver.jvnc.net!

a3bee2.radnet.com!cyphyn!randy@network.ucsd.edu

Subject: FM on 7105 khz To: info-hams@ucsd.edu

Has anyone heard that FM signal on 7105kc 0800-1300UTC?

Just curious...didn't know 'they' used FM to do broadcasting on SW.

- -

Randy KA1UNW If you get a shock while

servicing your equipment,

DON'T JUMP!

"Works for me!"

-Peter Keyes

randy@192.153.4.200 DON'T JUMP!

You might break an expensive tube!

Date: Sun, 14 Nov 1993 02:44:03 GMT

From: pacbell.com!amdahl!thunder!ikluft@ames.arpa

Subject: How to find the answers to frequently-asked questions about Ham Radio

To: info-hams@ucsd.edu

Posted-By: auto-faq 3.1.1.1 Archive-name: ham-faq-ptr

Date: Wed, 10 Nov 1993 23:42:31 GMT From: amd!amdcl2!brian@decwrl.dec.com

Subject: remote switch To: info-hams@ucsd.edu

Steve Bass writes:

> As part of a project of mine, I would like to construct a remote > control switch that operates on principles used by garage door > openers and car alarm systems.

>

> Steve Bass

> sbass@fc.hp.com

I just finished playing around with one of these and wanted to post what I'd learned to the net but wasn't sure whether anyone would be interested. Obviously, someone is, so here's the garage door info file:

I recently reverse-engineered the transmitter half of a simple garage door opener. My intent was to increase it's range beyond the current 30 foot maximum. I didn't figure out how to crank the power, but I did learn a lot about how they work. I haven't studied the receiver box yet.

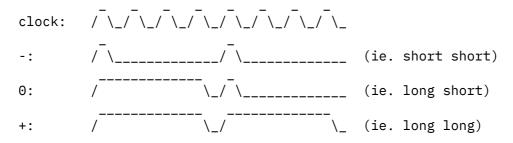
Clock:

The circuit derives a simple 50% duty cycle clock from an RC based oscillator. Most of this logic is contained in the single IC. There are two external resistors and one external capacitor used to set the clock frequency. (Note that this clock is a digital clock and has nothing to do with producing the actual RF.)

This clock has a period of approximately 1.15 milliseconds.

Coding:

The code for this unit is a 9 digit base 3 number. It is set via a 9 place dip switch with 3 positions per switch. The 3 positions are labeled minus zero and plus. The switch labeled 1 is sent first. Here are the waveforms associated with each "digit":



The IC reads the switch positions and produces a digital signal which is a sequence of nine of the above waveforms (one for each switch) strung end to end followed by a long period of zero output. The key is sent repeatedly while the button is held down.

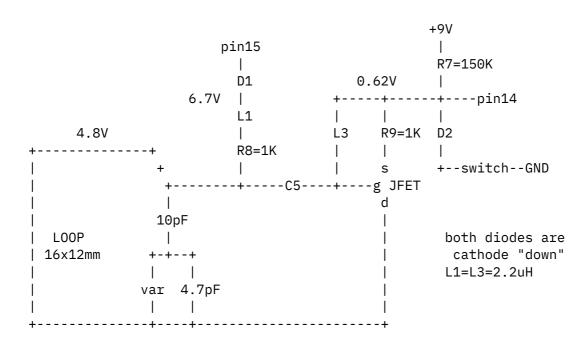
Keying:

There are only two connections between the IC and the RF oscillator. One of them carries the above "key" waveform and is apparently used to power the oscillator! I don't really understand the function of the second connection.

Oscillator:

The RF oscillator is composed of a single n-channel JFET transistor (type 2n5486) and several passive components. It appears that the oscillator tank circuit and the antenna have been combined into a single unit made of a loop on the circuit board with an adjustable capacitor across it. By adjusting the capacitor, I could change the oscillation frequency from 275MHz (max cap) to 335MHz (min cap). Note that most common remote units operate at 390MHz, so this obviously isn't one of them!

At the risk of producing a monster, here is an ASCII drawing of the RF oscillator circuit:



The voltages shown are during oscillation. I had some real difficulty measuring the frequency of this circuit because there isn't any point on the circuit that is a pure RF with no AC component due to the switching waveform. I finally just coupled to probe into the loop with a small loop on the oscilloscope probe. Pin 15 is the switching waveform. When it's high, the circuit oscillates. I don't know the function of pin 14. The switch is the button that activates the whole circuit.

Anyone with ideas for how to increase the power of this unit?

The receiver is in a weather sealed box and I haven't gotten brave enough to open it yet.

Brian McMinn N5PSS brian.mcminn@amd.com

Date: Sat, 13 Nov 1993 00:35:16 GMT

From: news.uiowa.edu!icaen!drenze@uunet.uu.net

Subject: What do I do now/ To: info-hams@ucsd.edu

Well, I'm almost ready to got on the air HF-wise for my first time. I've got my random-wire tuner, a tranceiver, a random wire, cables to connect it all...all I lack at the minute is a counterpoise (well, multiple counterpoises for the 2-3 bands I want to get on to) and an SWR meter, which I should be getting in a few days.

Question: Now what? I don't have a clue about what the controls on the front of my trusty old HW-101 do (what's a Final? What's a Drier erps...Driver Preselector?). How do I regulate my power output? In short, what in the world do I do?

The manual doesn't give me any help, and I don't seem to be able to find anything which tells me just how to tweak everything and get on the air!!!

Any help?

Peace es 73,

Doug NOYVW

_ _

		Douglas J Renze, NOYVW +1 319 337 4664	1
· /	•	drenze@icaen.uiowa.edu Douglas-Renze@uiowa.edu	•

IN GOD WE TRUST All Others Pay Cash

Date: 14 Nov 93 14:26:29 GMT

From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu

Subject: What do I do now/ To: info-hams@ucsd.edu

In article <1993Nov13.003516.27888@icaen.uiowa.edu> drenze@icaen.uiowa.edu (Douglas J Renze) writes:

>Well, I'm almost ready to got on the air HF-wise for my first time. I've >got my random-wire tuner, a tranceiver, a random wire, cables to connect it

>all...all I lack at the minute is a counterpoise (well, multiple counterpoises
>for the 2-3 bands I want to get on to) and an SWR meter, which I should be
>getting in a few days.

Well you really don't need an SWR meter for a random wire installation, but get one if you must. Just try not to be as fixated on obtaining low SWR readings as most hams are. All you really need for a random wire installation is a relative output indicator, a NE-2 bulb and loop will work fine.

- > Question: Now what? I don't have a clue about what the controls
 >on the front of my trusty old HW-101 do (what's a Final? What's a Drier
 >erps...Driver Preselector?). How do I regulate my power output? In short,
 >what in the world do I do?
- > The manual doesn't give me any help, and I don't seem to be able to >find anything which tells me just how to tweak everything and get on the air!!!

There are several schools of thought on rig tuning. Tune for maximum smoke seems to be a common approach, as does the all knobs to the right approach. But let's try to be a bit more rational. I haven't sat down in front of a HW101 in years, so I'll restrict myself to general advice.

First set your band and frequency controls to the band and frequency where you intend to operate. Switch the radio into the dummy load. Your tuner may have one included, if not, *that* should be your first purchase. Set the "load" control on the radio to minimum, usually fully counterclockwise, and set the driver tuning to the band of interest. (Note, on many rigs the driver preselector and the receive preselector are one and the same. In that case, before switching to the dummy load, peak received signals with the control. That'll get you close to the desired transmit setting.)

Now the next few steps have to be done rather quickly so read them through until you understand them before proceeding. Find out how to place the radio in transmit. There may be a "tune" position on a mode switch, and/or you may have to put the radio in CW mode and close the key. Make sure the meter is switched to PA amps. When you go into transmit, quickly adjust the "plate tuning" control for a "dip" in the meter reading. This will be the resonance point. The dip in the meter reading should be rather sharp. The meter reading should be rather low at this point. Now adjust the driver tuning control for a maximum reading of the meter. This will "peak" the driver tuning for your operating frequency. Your manual should tell you the ideal plate current for the radio. You will alternately advance the loading control while redipping the plate tuning control until you achieve this current reading at resonance. The dip will become less sharp as you increase loading. Note: you should do this rather quickly, no more than 10 seconds of transmit at a time, or you can damage the finals. If it takes you longer, let the finals rest a few seconds between efforts by unkeying. At this point the radio should be properly tuned.

Now you need to adjust the tuner to present the radio with a 50 ohm load. There are several ways to do this, but the best is with a noise bridge. Switch from the dummy load to the tuner and insert the noise bridge in the line between the radio and the tuner. Adjust the tuner for a null in the receiver noise. At this point remove the noise bridge from the line and you are ready to transmit, all without ever putting a dead carrier on the air. This is the ideal tuning method, but if you don't have a noise bridge, there are other ways.

If your tuner uses the typical circuit, there should be three adjustment knobs. One will be called input tuning, one will be a switch for the inductor taps, and the third will be output tuning. If your tuner is an 'L' network, there will only be two controls, a tuning control and the inductor switch. In some cases the inductor may be a roller inductor with a turns counting dial instead. In any event, here's a method for tuning up on the air. First select an unused spot in the band and tune the radio into the dummy as above. Switch to the tuner. Set the tuner's output tuning to minimum if you have that control. Now listening to the receiver, adjust the inductor taps, and input tuning, for strongest reception of atmospheric noise. Key the transmitter and adjust input tuning on the tuner for a dip on the radio plate meter. As before with tuning the transmitter, alternate between output tuning and input tuning controls on the tuner until the plate meter reads the proper current at dip. You're tuned up. Alternatively, couple an output indicator to the antenna, and adjust output tuning for maximum output while adjusting input tuning for plate current dip.

If you bought that SWR meter anyway, you can place it between the radio and the tuner and adjust the tuner's input tuning control for minimum SWR while adjusting output tuning for the desired plate current and maximum output.

This all sounds complicated, and requiring three hands, but it's really easy once you get the hang of it, and you should be able to tune the rig in 3 or 4 seconds. Once you get a feel for where the controls should be on various bands, you'll preset them before starting to tune, and all you'll need to do is quickly touch them up.

-

Gary

Gary Coffman KE4ZV Destructive Testing Systems | 534 Shannon Way Lawrenceville, GA 30244

Life's a journey, Live it.

| gatech!wa4mei!ke4zv!gary not a destination. | uunet!rsiatl!ke4zv!gary | emory!kd4nc!ke4zv!gary

Date: Wed, 10 Nov 93 23:48:47 EST

From: noc.near.net!news.delphi.com!usenet@uunet.uu.net

To: info-hams@ucsd.edu

References <2blvdg\$13fa@msuinfo.cl.msu.edu>, <1993Nov8.230739.14660@ke4zv.atl.ga.us>, <2boouf\$12m3@msuinfo.cl.msu.edu> Subject : Re: Radio Shack HTs

SOME of the Realistic scanners come out of the Uniden/Bearcat line, while others are done in-house by Tandy. Check the FCC ID on the unit to be sure -- AAO means a Tandy design, AMW means Uniden.

Date: Sun, 14 Nov 1993 03:59:10 GMT

From: spool.mu.edu!sol.ctr.columbia.edu!news.kei.com!news.oc.com!csci-

wiermac.etsu.edu!user@decwrl.dec.com

To: info-hams@ucsd.edu

References <1993Nov5.231254.15145@es.dupont.com>, <2bqons\$4t7@ds9.sim.es.com>, <2c0c4v\$gbc@wrdis02.robins.af.mil>ser Subject : Re: Fun with Radio Shack

In article <2c0c4v\$gbc@wrdis02.robins.af.mil>, sberman@robins.af.mil
(CONTRACTOR Steven G. Berman; WR-ALC/LKS) wrote:

>

- > Their rules don't allow that. They've got this national software POS
- > system ("last four digits") that has them scan in everything they
- > sell. If they give anything away, woe unto them! What I did was wait

That may be, but it isn't distributed back to the stores - I go to two different stores here 15 miles apart and they have totally separate data bases on customers...

====== insert usual disclaimers here =========
Bob Wier, East Texas State U., Commerce, Texas
wier@merlin.etsu.edu (watch for address change)

Date: Wed, 10 Nov 93 23:46:45 EST

From: noc.near.net!news.delphi.com!usenet@uunet.uu.net

To: info-hams@ucsd.edu

References <CG6JDz.C5v@apollo.hp.com>, <2blvdg\$13fa@msuinfo.cl.msu.edu>,

<1993Nov8.230739.14660@ke4zv.atl.ga.us>

Subject : Re: Radio Shack HTs

Actually the clue is the FCC ID (for the receiver's Part 15 approval); it starts with AAO, the code that is used for Tandy non-computer products. Tandy designed the rig themselves and hired the unnamed Korean maker (not one known for its own brand, according to Ed Juge) to build from their drawings.
